

DOCKET NO: 275181US0PCT



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

:

HARALD KELLER, ET AL.

: EXAMINER: SCHIRO, RYAN
RAYMOND

SERIAL NO: 10/544,780

:

FILED: AUGUST 8, 2005

: GROUP ART UNIT: 1792

FOR: METHOD FOR HYDROPHOBING
TEXTILE MATERIALS

:

APPEAL BRIEF

This is an appeal to the Board of Patent Appeals and Interferences under 35 U.S.C. §134 taken from the April 20, 2009, Final Rejection of Claims 1-8, 10 and 12-18 of Application 10/544,780, filed August 8, 2005. A Notice of Appeal was timely filed on August 20, 2009, with a request for a one month extension of time.

11/23/2009 SZEWDIE1 00000003 10544780

01 FC:1402

540.00 0P

STATEMENT OF REAL PARTY IN INTEREST

The real party in interest in this appeal is BASF Aktiengesellschaft, having an address of Ludwigshafen, Germany 67056, by virtue of an assignment recorded on October 29, 2007, at reel 020025 and frame 0931.

STATEMENT OF RELATED APPEALS AND INTERFERENCES

Appellants/Applicants, Appellants/Applicants' legal representative, and assignee, are aware of no appeals, interferences, judicial proceedings, or cases that are related to, directly affect or would be directly affected by, or have a bearing on the decision of the Board of Patent Appeals and Interferences in this appeal.

STATEMENT OF JURISDICTION

The Board of Patent Appeals and Interferences (hereafter Board) has jurisdiction under 35 U.S.C. §134. This is an appeal to the Board from the Final Rejection of pending Claims 1-8, 10 and 12-18, dated April 20, 2009. A Notice of Appeal was timely filed on August 20, 2009, with a request for a one month extension of time.

STATUS OF CLAIMS

Claims 1-8, 10 and 12-18 are active in this application.

Claims 9 and 11 were previously canceled during prosecution.

No claims are allowed.

No claims are withdrawn.

No claims are objected to.

Claims 1-8, 10 and 12-18 are finally rejected.

Claims 1-8, 10 and 12-18 are herein appealed.

Claim 19 was presented in an after-Final Request for Reconsideration and Amendment under 37 C.F.R. §1.116 on July 20, 2009; however, in an Advisory Action dated August 7, 2009, the Examiner indicated that the Request for Reconsideration and Amendment was not entered. Thus claim 19 is not of record with respect to this appeal.

Amendments to claims 12-15 were presented in an Amendment under 37 C.F.R. §41.33(a) and §1.116(b)(2) on November 9, 2009. These amendments were entered by the Examiner in an Advisory Action dated November 18, 2009. These amendments are reflected in the Claims Appendix.

STATUS OF AMENDMENTS

Appellants/Applicants filed a Request for Reconsideration and Amendment under 37 C.F.R. §1.116 on July 20, 2009. In an Advisory Action dated August 7, 2009, the Examiner indicated that the Request for Reconsideration and Amendment was not entered. In the Advisory Action, the Examiner indicated that the proposed amendment(s) were not entered because “they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issue for appeal; and/or ... they present additional claims without canceling a corresponding number of finally rejected claims.” In the Advisory Action, the Examiner indicated that the request for reconsideration “has been considered but does not place the application in condition for allowance because ... the Examiner contends that the references of Waeber and Kim are combinable (see Response to Arguments in Office Action dated 04/20/2009) and the slightly different solids content is obvious to modify.”

Claim 19 was presented in an after-Final Request for Reconsideration and Amendment under 37 C.F.R. §1.116 on July 20, 2009; however, in an Advisory Action dated August 7, 2009, the Examiner indicated that the Request for Reconsideration and Amendment was not entered. Thus claim 19 is not of record with respect to this appeal.

Amendments to claims 12-15 were presented in an Amendment under 37 C.F.R. §41.33(a) and §1.116(b)(2) on November 9, 2009. Claim 12 was amended to be dependent from Claim 8 and Claims 13-15 were amended for antecedent basis purposes in light of the amendment to Claim 12. These amendments were entered by the Examiner in an Advisory Action dated November 18, 2009. These amendments are reflected in the Claims Appendix.

SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent Claim 1 is directed to a process for finishing textile materials comprising treating the textile materials with at least one aqueous liquor which comprises at least one organic polymer; at least one organic or inorganic solid in particulate form having a median (number average) particle diameter in the range from 1 nm to 350 nm; at least one emulsifier comprising at least one copolymer of ethylene and at least one α,β -unsaturated carboxylic acid or at least one anhydride of an α,β -unsaturated mono- or dicarboxylic acid; wherein the at least one organic or inorganic solid is present in the liquor in a fraction of at least 5.5 g/l. (Claims Appendix, Claim 1) (Evidenced by Specification, page 1, lines 5-8, page 8, lines 36-38, page 9, lines 28-30, and original claims 1 and 6).

Claims 2-4, 6, 7 and 16-18 depend directly from Claim 1. Dependent Claims 2-4, 6, 7 and 16-18 stand or fall with Claim 1.

Dependent Claim 5 is argued separately. Claim 5 limits the organic or inorganic solid(s) content of the liquor of Claim 1 to a fraction of at least 7 g/l (Claims Appendix, Claim 5) (Evidenced by Specification, page 7, lines 14-17, and original claim 5).

Independent Claim 8 is directed to aqueous liquors comprising at least one organic polymer and at least one organic or inorganic solid in particulate form having a median (number average) particle diameter in the range from 1 nm to 350 nm, and at least one emulsifier selected from copolymers of ethylene and at least one α,β -unsaturated carboxylic acid or at least one anhydride of an α,β -unsaturated mono- or dicarboxylic acid, wherein the organic or inorganic solid or solids are present in the liquor in a fraction of at least 5.5 g/l. (Claims Appendix, Claim 8) (Evidenced by Specification, page 8, lines 36-38, page 9, lines 28-30, and original claims 6 and 8).

Claims 10 and 12-15 depend directly or indirectly from Claim 8. Dependent Claims 10 and 12-15 stand or fall with Claim 8.

There are no claims with means or step plus function language on appeal.

There are no drawings associated with the Application on appeal.

GROUND OF REJECTION TO BE REVIEWED

(1) Claims 1-4, 6-8, 10 and 12-18 stand finally rejected under 35 U.S.C. §103(a) as being unpatentable over “Waeber” (*Waeber et al.*, US 2005/0066448, published March 31, 2005) in view of “Kim” (*Kim et al.*, “Preparation of Ethylene-Modified Latex Using Ethylene-Acrylic Acid Resin,” *Macromol. Symp.* 151, 509-514, published 2000).

(2) Claim 5 stands finally rejected under 35 U.S.C. §103(a) as being unpatentable over *Waeber* in view of *Kim*.¹

ARGUMENT

(1) The rejection of Claims 1-4, 6-8, 10 and 12-18 under 35 U.S.C. §103(a) over *Waeber* in view of *Kim*

For clarity of the record, Appellants/Applicants note that independent Claim 1 will be addressed in the following remarks before independent Claim 8.

A. INDEPENDENT CLAIM 1 - PROCESS UTILIZING AQUEOUS LIQUOR(S)

(i) The Examiner erred in concluding that the claimed invention is *prima facie* obvious over the cited references

The Office asserts: “Waeber teaches a method for applying a finishing layer to a textile support material (abstract). Waeber also teaches a textile material that is coated with the finishing layer, as required by claim 7 (claims 19-22). The finishing layer is an aqueous mixture (0036) and can include crosslinked natural or synthetic hydroxyl, carbonyl, amino or thiol group containing polymers onto the textile material (0027). Hydrophobic silica particles, which are inorganic solids, having an average particle size of 5-100 nm are also set into the finishing layer, as required by claims 1, 2, 4, 6, 8, 10 and 12 (0034). The hydrophobic silica particles are present in the liquor in a fraction of 1.5-5 g/L, as required by claims 17 and 18 (Examples 1-8).” (Office Action dated April 20, 2009, ¶ 4).

¹ It is noted that Claim 5 is included with Claims 1-4, 6-8, 10 and 12-18 in the obviousness rejection as presented by the Office in the Office Action dated April 20, 2009. However, as Claim 5 is being argued separately, the arguments relating to Claim 5 (i.e., part (2)) have been separated from those relating to Claims 1-4, 6-8, 10 and 12-18 (i.e., part (1)).

The Office admits that “Waeber does not teach that an emulsifier is specifically included in the aqueous finishing liquor or that the solids are present in a 5.5-7 g/L amount.” (Office Action dated April 20, 2009, ¶ 5). Nonetheless, the Office looks to *Kim* in light of the stated deficiencies of *Waeber* and asserts that “Kim is drawn to the use of an ethylene-acrylic acid resin (EAA) as an emulsifier with organic polymers, such as polystyrene or polymethacrylate, as required by claims 1, 8, 10, 12 and 16 (Introduction).” (Office Action dated April 20, 2009, ¶ 6).

In view of the foregoing assertions by the Office with respect to *Waeber* and *Kim*, the Office concludes that (a) “It would have been obvious to a person ordinarily skilled in the art at the time of the invention to combine the teachings of Waeber, an organic polymer-solid material aqueous solution for finishing textile materials which is emulsified, with an emulsifier comprised of EAA that is used with organic polymers, as taught by Kim to make an organic polymer-solid material aqueous solution with an EAA emulsifier.” (Office Action dated April 20, 2009, ¶ 7), and (b) “It would have been obvious to a person ordinarily skilled in the art at the time of the invention that the solid could be in the aqueous composition in a fraction of 5.5-7 g/L, 0.1-100 g/L or 0.2-10 g/L, as required by claims 1, 5, 8, 10, 17 and 18. It is well settled in the determination of the optimum values for such as the solid fraction in the aqueous liquor is within the skill of one practicing in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980).” (Office Action dated April 20, 2009, ¶ 8).

Concerning (a), Appellants/Applicants submit that while it is *possible* to combine *Waeber* and *Kim*, there is no motivation to do so for the following reasons. The object of the claimed invention is to provide a process for finishing textile materials which are both water/soil repellant and have improved mechanical strength. Appellants’/Applicants’ specification describes how textiles finished according to *Waeber*’s process have inferior mechanical strength (page 2, lines 1-11; WO 01/75216 is the foreign counterpart to the cited

Waeber reference). Therefore, *Waeber* attains water/soil repellency at the expense of mechanical strength, which is the second desired property of the claimed invention.

Additionally, neither *Waeber* nor *Kim* discusses/suggests that the inclusion of an emulsifier (i.e., EAA) would improve mechanical strength. Accordingly, neither *Waeber* nor *Kim* recognizes the problems sought to be addressed by the claimed invention where a textile is produced having water/soil repellency, but also has improved mechanical strength. The Supreme Court has held that the discovery of a problem or a cause of a problem can lend patentability to an invention. The discovery of a problem is often the key to making a patentable invention. Thus, the patentability of an invention under 35 U.S.C. §103 must be evaluated against the background of the highly developed and specific art to which it relates, and this background includes an understanding of those unsolved problems persisting in the art solved by the invention. *See, Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 43 S.Ct. 322, 67 L.Ed. 523 (1923). Accordingly, one would not be motivated to include the emulsifier of *Kim* in the aqueous liquor of *Waeber* in order to improve mechanical strength while maintaining sufficient water/soil repellency. Therefore, without motivation to combine *Waeber* and *Kim*, the Examiner has erred in concluding that the claimed invention is *prima facie* obvious over the combination of *Waeber* and *Kim*.

With respect to (b), Appellants/Applicants note that the Office refers to fractions such as “5.5-7 g/L, 0.1-100 g/L or 0.2-10 g/L” as relating to “claims 1, 5, 8, 10, 17 and 18” and the solid fraction of the liquor (Office Action dated April 20, 2009, ¶ 8). It appears that the Office has confused the organic/inorganic solids content of the liquor of claims 1, 5, 8 and 10, with the fraction of emulsifier in the liquor of claims 17 and 18 (0.1-100 g/L and 0.2-10 g/L respectively). Furthermore, claims 1, 8 and 10 recite the organic or inorganic solids content of the liquor to be “at least 5.5 g/L”, not 5.5-7 g/L as alleged by the Office, and claim

5 recites the organic or inorganic solids content of the liquor to be “at least 7 g/L”, not 5.5-7 g/L as alleged by the Office.

Regarding the organic or inorganic solids content of the liquor being “at least 5.5 g/L” in independent claim 1, Appellants/Applicants submit that this limitation is not *prima facie* obvious in light of *Kim*’s silence with respect to such contents and *Waeber*’s disclosure of liquors containing up to 5 g/L. The ranges of “up to 5 g/L” (*Waeber*) and “at least 5.5 g/L” (Applicants’ claims) do not touch or overlap as required by MPEP 2144.05 for the obviousness of ranges (See *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)). Accordingly, without said overlap/touching of the claimed parameter’s range, the Examiner has again erred in concluding that the claimed invention is *prima facie* obvious over the combination of *Waeber* and *Kim*.

(ii) The Examiner erred in concluding that the claimed invention is obvious over the cited references

Even if a *prima facie* case of obviousness in light of *Waeber* and *Kim* did exist, which it does not, Appellants/Applicants submit that (a) there is no disclosure/suggestion within the art to modify the solids content of the disclosed liquor to that which is claimed and (b) the combination of *Waeber* and *Kim* also fails to disclose/suggest the improved mechanical strength of the claims invention.

(a) Lack of Disclosure/Suggestion to Modify the Solids Content of the Liquor

Even if one skilled in the art were to introduce an emulsifier (e.g., EEA) into the liquor of *Waeber*, *Waeber* only discloses liquors containing solids up to 5 g/l (Aerosil R812S of Examples 2, 4, 7 and 8; see also Appellants’/Applicants’ specification: page 2, lines 1-7). In contrast, Appellants/Applicants claim a solids content of the liquor being at least 5.5 g/l

(see claim 1). Thus, the “preferred” working range as disclosed by *Waeber* would be 5.0 g/l or less, not 5.5 g/l or more as claimed by Appellants/Applicants. With this in mind, one skilled in the art would have no motivation to look above the “preferred” thresholds of 5 g/l. Furthermore, courts have held that where, as here, the prior art disclosure suggests the outer limits of the range of suitable values, and that the optimum resides within that range, and where there are indications elsewhere that in fact the optimum should be sought within that range (all examples), the determination of optimum values outside that range may not be obvious (*In re Sebek*, 465 F.2d 902, 175 USPQ 93, 95 (CCPA 1972)). Thus, without any motivation to consider a solids content above 5.0 g/l, Appellants’/Applicants’ claims are not rendered obvious. Accordingly, the Examiner erred in concluding that the claimed invention is obvious over the combination of *Waeber* and *Kim*.

(b) Combination of *Waeber* and *Kim* Does Not Render Obvious Improved Mechanical Strength of Claimed Invention

In response to Applicants’ remarks filed January 29, 2009, regarding improved mechanical strength of textiles obtained from the claimed process (reiterated below), the Office has dismissed such arguments because “the features upon which applicant relies (i.e., that the mechanical strength of the textiles obtained are improved) are not recited in the rejected claim(s)” (Office Action date April 20, 2009, ¶ 10).

Appellants/Applicants point out that the Office’s insinuation that an improved/unexpected property of the claimed invention must be included in the body of the claims to be examined/considered relevant to patentability has no legal basis. Quite the opposite, *In re Corkill* and *In re Chupp* explain how *evidence*, not claim limitations, of unexpected or superior properties can rebut a *prima facie* case of obviousness (*In re Corkill*,

711 F.2d 1496, 226 USPQ 1005 (Fed. Cir. 1985); *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987)) (see also MPEP 716.02(a)).

Furthermore, to be given substantial weight in the determination of obviousness or non-obviousness, evidence of secondary considerations must be relevant to the subject matter as claimed, and therefore the examiner must determine whether there is a nexus between the merits of the claimed invention and the evidence of secondary considerations (*Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 305 n.42, 227 USPQ 657, 673-674 n. 42 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986)). The term "nexus" designates a factually and legally sufficient connection between the objective evidence of non-obviousness and the claimed invention so that the evidence is of probative value in the determination of non-obviousness (*Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 7 USPQ2d 1222 (Fed. Cir.), *cert. denied*, 488 U.S. 956 (1988) (see also MPEP §716.01(b))). Applicants submit the indication of improved mechanical strength (specification: paragraph bridging pages 11 and 12) is relevant to the subject matter as claimed and does not require that additional limitations be read into the claims. As such, the specification illustrates the superior effects provided by the presently claimed invention and would rebut even a *prima facie* case of obviousness.

The combination of *Waeber* and *Kim*, if one were inclined to combine them, which they would not be, does not disclose or suggest the improved mechanical strength of textiles obtained by Appellants'/Applicants' claims. Page 2, lines 3-6 and 9-10 of the specification describes: "The finishing process described in WO 01/75216 [*Waeber*] provides finishing layers in which the colloids are anisotropically dispersed in the dispersion medium in that the colloids are observed to become concentrated at the boundary layer between the finishing layer and the surrounding surface." and "textiles finished by the process described in WO 01/75216 [*Waeber*] lack satisfactory mechanical strength in many cases." (emphasis added)

In contrast, the paragraph bridging pages 11 and 12 of the specification explains the following: “Textile materials according to the present invention further exhibit very good mechanical strength. In the textile materials coated according to the present invention, the solid or solids used are isotropically or substantially isotropically distributed throughout the finishing coat, i.e., no concentration is observed in the boundary layer between the finishing coat and the surrounding atmosphere.” Thus, it is the Appellants/Applicants position that the combination of *Waeber* and *Kim* does not render obvious the improved mechanical strength of textiles obtained by Appellants’/Applicants’ claims, especially in view of the alteration of the solids content of the liquor which neither reference alone or in combination discloses or suggests. Accordingly, the Examiner erred in concluding that the claimed invention (i.e., independent Claim 1) is obvious over the combination of *Waeber* and *Kim*.

B. INDEPENDENT CLAIM 8 - AQUEOUS LIQUORS

Claim 8 is drawn toward the aqueous liquor already discussed above with respect to Claim 1 wherein said aqueous liquor is used in a treatment process of textile materials. Accordingly, the following arguments with respect to Claim 8 are *in addition to* those already presented above with respect to Claim 1 which are herein incorporated by reference.

As explained above in A(i) (specifically, pages 8-9), the combination of *Waeber* and *Kim* fails to provide a *prima facie* case of obviousness because neither reference, alone or in combination, discloses or suggests an aqueous liquor having an organic/inorganic solids content of at least 5.5 g/L (see e.g., claim 8), nevermind the use of such an aqueous liquor for finishing a textile material (see e.g., claim 1) having certain desired properties.

Furthermore, as explained above in A(ii)(a), even if a *prima facie* case of obviousness in light of *Waeber* and *Kim* did exist, which it does not, both of these references, alone or in combination, fail to disclose or suggest a modification of the solids content of the liquor of

Waeber such that the claimed solids content is obtained. Accordingly, without a disclosure of the solids content of the aqueous liquor of Claim 8 and without a disclosure or suggestion to modify the solids content of the reference(s) to encompass that which is claimed, the combination of *Waeber* and *Kim* fails to render obvious the aqueous liquors of Claim 8. As such, the Examiner erred in concluding that the claimed invention (i.e., independent Claim 8) is obvious over the combination of *Waeber* and *Kim*.

(2) The rejection of Claim 5 under 35 U.S.C. §103(a) over *Waeber* in view of *Kim*

Claim 5 is dependent from Claim 1 and therefore includes all of the limitations of Claim 1. Furthermore, Claim 5 defines the solids content of the liquor to be “at least 7 g/L” which is narrower than the recited content of “at least 5.5. g/L” in Claim 1. Accordingly, the following arguments with respect to Claim 5 are *in addition to* those already presented above with respect to Claim 1 which are herein incorporated by reference.

A. The Examiner erred in concluding that Claim 5 is *prima facie* obvious over the cited references

Appellants/Applicants submit that the solids content of the liquor of Claim 5 (i.e., ≥ 7 g/L) is not *prima facie* obvious in light of *Kim*'s silence with respect to such contents and *Waeber*'s disclosure of liquors containing up to 5 g/L. The ranges of “up to 5 g/L” (*Waeber*) and “at least 7 g/L” (Applicants' claims) do not touch or overlap as required by MPEP 2144.05 for the obviousness of ranges (See *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)). Accordingly, without said overlap/touching of the claimed parameter's range, the Examiner has again erred in concluding that the claimed invention is *prima facie* obvious over the combination of *Waeber* and *Kim*.

B. The Examiner erred in concluding that Claim 5 is obvious over the cited references

Even if a *prima facie* case of obviousness in light of *Waeber* and *Kim* did exist, which it does not, Appellants/Applicants submit that (i) there is no disclosure/suggestion within the art to modify the solids content of the disclosed liquor to that which is claimed and (ii) the combination of *Waeber* and *Kim* also fails to disclose/suggest the improved mechanical strength of the claims invention.

(i) Lack of Disclosure/Suggestion to Modify the Solids Content of the Liquor

Even if one skilled in the art were to introduce an emulsifier (e.g., EEA) into the liquor of *Waeber*, *Waeber* only discloses liquors containing solids up to 5 g/l (Aerosil R812S of Examples 2, 4, 7 and 8; see also Appellants'/Applicants' specification: page 2, lines 1-7). In contrast, Appellants/Applicants claim a solids content of the liquor being at least 7 g/l (see claim 5). Thus, the "preferred" working range as disclosed by *Waeber* would be 5.0 g/l or less, not 7 g/l or more as claimed by Appellants/Applicants. With this in mind, one skilled in the art would have no motivation to look above the "preferred" thresholds of 5.0 g/l. Furthermore, courts have held that where, as here, the prior art disclosure suggests the outer limits of the range of suitable values, and that the optimum resides within that range, and where there are indications elsewhere that in fact the optimum should be sought within that range (all examples), the determination of optimum values outside that range may not be obvious (*In re Sebek*, 465 F.2d 902, 175 USPQ 93, 95 (CCPA 1972)). Thus, without any motivation to consider a solids content above 5.0 g/l, Appellants'/Applicants' claims are not rendered obvious. Accordingly, the Examiner erred in concluding that the claimed invention is obvious over the combination of *Waeber* and *Kim*.

(ii) Combination of *Waeber* and *Kim* Does Not Render Obvious Improved

Mechanical Strength of Claimed Invention

As the argument presented in Part (1)B(ii) above is not changed due to the difference in solids content of claim 5, Part (1)B(ii) is herein incorporated by reference in order to minimize redundancy.

As such, just as was the case in Part (1)B(ii) above, it is the Appellants/Applicants position that the combination of *Waeber* and *Kim* does not render obvious the improved mechanical strength of textiles obtained by Appellants'/Applicants' claims, especially in view of the alteration of the solids content of the liquor which neither reference alone or in combination discloses or suggests. Accordingly, the Examiner erred in concluding that the claimed invention is obvious over the combination of *Waeber* and *Kim*.

CONCLUSION

For the reasons stated herein, the combination of *Waeber* and *Kim* does not render obvious the claimed invention; therefore:

(1) The Final Rejections of Claims 1-4, 6-8, 10 and 12-18 under 35 U.S.C. §103(a) should be reversed; and

(2) The Final Rejection of Claim 5 under 35 U.S.C. §103(a) should be reversed.

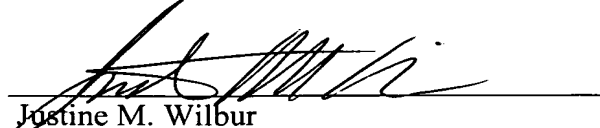
Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.
Norman F. Oblon

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 07/09)


Justine M. Wilbur
Attorney of Record
Registration No. 59,678

CLAIMS APPENDIX

Claim 1: A process for finishing textile materials comprising treating the textile materials with at least one aqueous liquor which comprises
at least one organic polymer,
at least one organic or inorganic solid in particulate form having a median (number average) particle diameter in the range from 1 nm to 350 nm,
at least one emulsifier comprising at least one copolymer of ethylene and at least one α,β -unsaturated carboxylic acid or at least one anhydride of an α,β -unsaturated mono- or dicarboxylic acid,
wherein the at least one organic or inorganic solid is present in the liquor in a fraction of at least 5.5 g/l.

Claim 2: The process according to claim 1, wherein the at least one organic or inorganic solid is hydrophobic.

Claim 3: The process according to claim 1, wherein the surface of the textile materials is provided with a bonding layer prior to said treating.

Claim 4: The process of claim 1, wherein the at least one organic or inorganic solid comprises at least one inorganic solid.

Claim 5: The process according to claim 1, wherein the at least one organic or inorganic solid is present in the liquor in a fraction of at least 7 g/l.

Claim 6: The process according to claim 1, wherein the at least one organic or inorganic solid comprises a particle diameter (median value, number average) in the range from 1 to 350 nm.

Claim 7: Textile materials finished according to the process of claim 1.

Claim 8: Aqueous liquors comprising at least one organic polymer and at least one organic or inorganic solid in particulate form having a median (number average) particle

diameter in the range from 1 nm to 350 nm, and at least one emulsifier selected from copolymers of ethylene and at least one α,β -unsaturated carboxylic acid or at least one anhydride of an α,β -unsaturated mono- or dicarboxylic acid, wherein the organic or inorganic solid or solids are present in the liquor in a fraction of at least 5.5 g/l.

Claim 9 (Canceled).

Claim 10: A process for preparing aqueous liquors according to claim 8 comprising mixing, to form the aqueous liquors, the following components:

at least one organic polymer,

at least one organic or inorganic solid in particulate form having a median (number average) particle diameter in the range from 1 nm to 350 nm,

at least one emulsifier comprising at least one copolymer of ethylene and at least one α,β -unsaturated mono- or dicarboxylic acid or at least one anhydride of an α,β -unsaturated dicarboxylic acid,

water, and

optionally at least one organic solvent and further components,

wherein the at least one organic or inorganic solid in particulate form is present in the aqueous liquor in a fraction of at least 5.5 g/l.

Claim 11 (Canceled).

Claim 12: A formulation comprising the aqueous liquor of claim 8.

Claim 13: The formulation of claim 12, further comprising at least one organic solvent.

Claim 14: The formulation of claim 12, further comprising water, wherein the water-fraction is not more than 15% by weight.

Claim 15: The formulation of claim 12, further comprising at least one organic solvent and water, wherein the water-fraction is not more than 15% by weight.

Claim 16: The process according to claim 1, wherein the at least one α,β -unsaturated carboxylic acid or the at least one anhydride of an α,β -unsaturated mono- or dicarboxylic acid is selected from the group consisting of acrylic acid, methacrylic acid, crotonic acid, maleic acid, fumaric acid, methylenemalononic acid, maleic anhydride, and itaconic anhydride.

Claim 17: The process according to claim 1, wherein the fraction of emulsifier in the liquor is from 0.1 to 100 g/l.

Claim 18: The process according to claim 1, wherein the fraction of emulsifier in the liquor is from 0.2 to 10 g/l.

*

EVIDENCE APPENDIX

Affidavits and Declarations

No Affidavit or Declaration is relied upon in support of the patentability of the claims in this appeal.

Other Evidence

- (1) *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 43 S.Ct. 322, 67 L.Ed. 523 (1923).
- (2) *In re Sebek*, 465 F.2d 902, 175 USPQ 93, 95 (CCPA 1972).
- (3) *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 305 n.42, 227 USPQ 657, 673-674 n. 42 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986).
- (4) *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 7 USPQ2d 1222 (Fed. Cir.), *cert. denied*, 488 U.S. 956 (1988).
- (5) *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).
- (6) *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).
- (7) *In re Corkill*, 711 F.2d 1496, 226 USPQ 1005 (Fed. Cir. 1985).
- (8) *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987).

RELATED PROCEEDINGS APPENDIX

None.

RELATED CASE STATUS UPDATE**Application No: 10/544,780****Reexam Control No:****Nov-20-2009**

Application No	Reexam Control No	PTO Action Description	PTO Mail Date	Applicant Action Description	Date Filed
11/568,858		Final Rejection	Oct-21-2009		